

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
7 July 2005 (07.07.2005)

PCT

(10) International Publication Number
WO 2005/060978 A2

(51) International Patent Classification⁷: **A61K 33/00**

(21) International Application Number:
PCT/IT2004/000713

(22) International Filing Date:
21 December 2004 (21.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
RM2003A000590
22 December 2003 (22.12.2003) IT

(71) Applicant (for all designated States except US): **UNIVERSITÀ DEGLI STUDI DI SIENA** [IT/IT]; Via Banchi di Sotto, 55, I-53100 Siena (IT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MARCOLONGO, Roberto** [IT/IT]; c/o Università degli Studi di Siena, Via Banchi di Sotto, 55, I-53100 Siena (IT). **CATENACCIO, Manuela** [IT/IT]; c/o Università degli Studi di Siena, Via Banchi di Sotto, 55, I-53100 Siena (IT). **CHINDAMO, Daniela** [IT/IT]; c/o Università degli Studi di Siena, Via Banchi di Sotto, 55, I-53100 Siena (IT). **LORENZINI, Sauro** [IT/IT]; c/o Università degli Studi di Siena, Via Banchi di Sotto, 55, I-53100 Siena (IT). **SELVI, Enrico** [IT/IT]; c/o Università degli Studi di Siena, Via Banchi di Sotto, 55, I-53100 Siena (IT). **CINI, Renzo** [IT/IT]; c/o Università degli Studi di Siena, Via Banchi di Sotto, 55, I-53100 Siena (IT). **TAMASI, Gabriella** [IT/IT]; c/o Università degli Studi di Siena, Via Banchi di Sotto, 55, I-53100 Siena (IT). **GREGORKIEWITZ, Michele**

[IT/IT]; c/o Università degli Studi di Siena, Via Banchi di Sotto, 55, I-53100 Siena (IT). **CAMPANA, Alberto** [IT/IT]; c/o Università degli Studi di Siena, Via Banchi di Sotto, 55, I-53100 Siena (IT). **CAVALLO, Giovanni** [IT/IT]; c/o Università degli Studi di Siena, Via Banchi di Sotto, 55, I-53100 Siena (IT).

(74) Agents: **CAPASSO, Olga et al.**; De Simone & Partners S.p.A., Via V. Bellini, 20, I-00198 Roma (IT).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **POLYMETAPHOSPHATE BASED FORMULATIONS FOR THERAPY OF MICROCRYSTALLINE ARTHROPATHIES**

(57) Abstract: Soluble pharmaceutical composition for the treatment of articular pathologies comprising an effective amount of a least one linear or cyclic polymetaphosphate or a soluble and pharmaceutically acceptable salt thereof, and appropriate diluents.

BEST AVAILABLE COPY

WO 2005/060978 A2